

## **II. REMARKS**

Claims 19-39 are pending. Claims 19-22 and 24-39 stand rejected. Claim 23 stands objected to. In view of the following, all of the currently pending claims are in condition for allowance, and, therefore, the Applicants' attorney requests the Examiner to withdraw all of the outstanding rejections. **However, if after considering this response the Examiner does not allow all the claims, the Applicant's attorney requests that the Examiner contact him to schedule a teleconference to further the prosecution of the application.**

### **Information Disclosure Statement**

Submitted herewith is a copy of the European Search Report referenced by the Examiner.

### **Rejection of Claims 19-22 and 24-39 Under 35 U.S.C. § 102(e) as Being Anticipated**

#### **By Chang**

#### **Claim 19**

Claim 19 recites a substrate and a plurality of insulation structures delimiting active areas and having respective portions projecting from the substrate, wherein the insulation structures have respective recesses, which accommodate at least partially conductive regions.

For example, referring to FIGS. 10-12 and paragraphs 20-23 of the patent application, a semiconductor wafer 20 has a substrate 21. The substrate 21 is etched, and trenches 24 are opened, which delimit memory active areas 25 and circuitry active areas 26, where memory cells and, respectively, read/write circuits and control circuits will subsequently be formed. The active array areas 25 and circuitry-active areas 26 are delimited laterally by trench insulation structures 27, which extend in part inside the substrate 21 and have projecting portions 27a projecting at the top from the substrate 21. First and second recesses 32, 33 are formed inside the insulation structures 27, which delimit the memory active areas 25 and, respectively, the circuitry active areas 26. Residual polysilicon portions inside the second recesses 33, the cavities 34 and the

third recesses 35 form, in the first case, resistors 40 and first plates 41a of capacitors, and in the other cases, floating gates 44a, 45a of high-performance memory cells and standard memory cells, respectively.

Chang fails to teach or suggest insulation structures having respective recesses that accommodate at least partially conductive regions. For example, at, e.g., FIG. 8 and paragraph 22, Chang teaches a substrate 200 within which are disposed trench isolation structures 208a (cited by the Examiner as being a plurality of insulation structures). As can be seen in FIG. 8, the structures 208a do not have recesses that accommodate a conductive region. Accordingly, Chang fails to teach or suggest the limitations of claim 19.

On page 4 of the instant Office Action, the Examiner cites a polysilicon layer (conductive region) 216 shown in FIG. 8 of Chang as being “accommodated by [a] recess” in order to show that Chang teaches the limitations of claim 1. However, as shown in FIG. 8, the conductive region 216 is entirely arranged above the trench insulation structures 208a. The only recess(es) accommodating the conductive region 216 are defined by the irregular shape of a dielectric layer 214. However, the layer 214 is separate from and not a part of the trench insulation structures 208a. Accordingly, the Examiner is respectfully requested to clarify which portions of the trench insulation structures 208a he regards as being recesses that accommodate the conductive region 216.

**Claims 26 and 34**

Claims 26 and 34 are patentable for reasons similar to those discussed in support of the patentability of claim 19.

**Claims 20-25, 27-33 and 35-39**

Claims 20-25, 27-33 and 35-39 are patentable by virtue of their respective dependencies from claims 19, 26 and 34.

**Conclusion**

In light of the foregoing, claims 19-39 are in condition for full allowance, which is respectfully requested.

In the event additional fees are due as a result of this amendment, payment for those fees has been enclosed in the form of a check. Should further payment be required to cover such fees you are hereby authorized to charge such payment to Deposit Account No. 07-1897.

DATED this 2nd day of November 2005.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'P. G. Scott Born', written over a horizontal line.

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